



NUTRITIONAL RECOMMENDATIONS FOR PATIENTS UNDERGOING GLUCOCORTICOID THERAPY



Getting to know *food processing* categories

A healthy diet should be balanced, rich in natural and unprocessed foods, and contain few ultraprocessed products. But, do you know how to tell them apart?

Currently, many food guides recommend that we eat **MORE** unprocessed foods, and **AVOID** ultraprocessed foods. This dietary pattern is related to a healthier lifestyle, and can possibly lower risk of many diseases, and possibly improve your health when taking glucocorticoids.



Unprocessed or minimally processed foods

These foods should be the basis of our diet. They go through either no processing or very minimal processing, such as cleaning and pasteurizing.

Rice, beans, pasta, eggs, milk, fruits, vegetables, and meats are the main components of this category.



Culinary ingredients (Oils, fat, salt and sugar)

Ingredients from this group should be used carefully and in moderation to season and cook other foods, creating nutritious and delicious recipes.



Processed foods

Foods in these group are made by combining natural foods with culinary ingredients, such as bread, made with flour, salt, and oil; cheeses, made from milk and salt; and preserved vegetables, made from natural vegetables and preserving agents. Consumption of these foods should be moderate.



Ultraprocessed foods

These foods should be avoided and be minimally present in our diet.

They're made by the industry through large amounts of added salt, sugar, fats, chemical flavoring and dyeing agents. Even though these foods are convenient, they're commonly nutritionally unbalanced and can be harmful to our health. Examples of this group are sodas, powdered fruit juices, snacks and candies, and other instant or packaged meals.



How can diet help with the *adverse effects* of glucocorticoid therapy?

Glucocorticoid therapy
can lead to adverse
effects, such as:



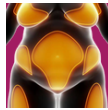
Increased risk of
bone fracture



Increased risk for
cardiovascular
diseases



Muscle weakening



Weight gain

Improving your **dietary habits**
can be useful to reduce these
adverse effects and improve
quality of life.

Calcium

Calcium (Ca) is a mineral responsible
for many functions in the body, but
mainly for building strong bones.

Recommended daily intake

Aim for
1,000–1,200 mg per day

4 to 5 portions of
calcium-rich foods

Calcium-rich foods

Meal



Whole cow milk
1 cup (240 ml)
Ca: 280 mg

Breakfast and snacks



Mozzarella cheese
1 and 1/2 slices (50 g)
Ca: 350 mg

Breakfast and snacks



Whole yogurt
1 cup (240 g)
Ca: 290 mg

Breakfast and snacks



Cooked dark leafy greens
2 tablespoons (42 g)
Ca: 60 mg

Lunch and dinner

Recommended daily intake

600–1000 UI per day

2 to 3 portions of
foods rich in vitamin D

Vitamin D

An essential nutrient that functions as a hormone, improving and maintaining bone health.

Vitamin D can be either produced by the body, following sunlight exposure, or acquired by the diet. If you have a skin condition, or have poor sunlight exposure in your daily routine, make sure to ingest it via your diet!



Whole Milk



Sardines



Salmon



Yogurt



Trout



Fortified products

Dietary sources of vitamin D

Source: U.S. Department of Agriculture FoodData Central



Whole milk (fortified)

1 cup (240 g)

Vit. D: 90 UI



Trout

3 ounces (85 g)

Vit. D: 650 UI



Salmon

3 ounces (85 g)

Vit. D: 383 UI



Skimmmed Yogurt

8 ounces (220 g)

Vit. D: 116 UI

Protein

Protein is essential for creating and maintaining healthy and strong muscles.

A few options are:



Rice and Beans



Chickpeas



Soybeans



Eggs



Chicken or fish



Meat

Recommendation

Varies according to individual needs, but aim for at least two portions of protein-rich foods per day.

Sodium

Sodium is an essential mineral that regulates blood pressure and fluids throughout the body. During glucocorticoid use, blood pressure might increase, and sodium intake must be moderated.



However, it should not be excluded entirely from the diet, but rather consumed in a balanced amount.

PREFER

Preparing your own meals, without adding too much salt, and using natural and flavorful ingredients



- ONION
- GARLIC
- FRESH AND DRIED HERBS
(basil, rosemary, thyme, parsley, cilantro, green onion)

AVOID

- Adding too much salt in meals
- Consuming ultraprocessed foods
(examples: instant pasta, salty snacks)
- Consuming other products rich in sodium
(examples: industrialized sauces and vegetable/meat stock cubes)



Different people have different needs!

**Regularly check with your doctor or a registered dietitian
nutritionist to figure out the best
recommendations for you!**

